



Over-the-Air TV Antenna

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TOOLS:

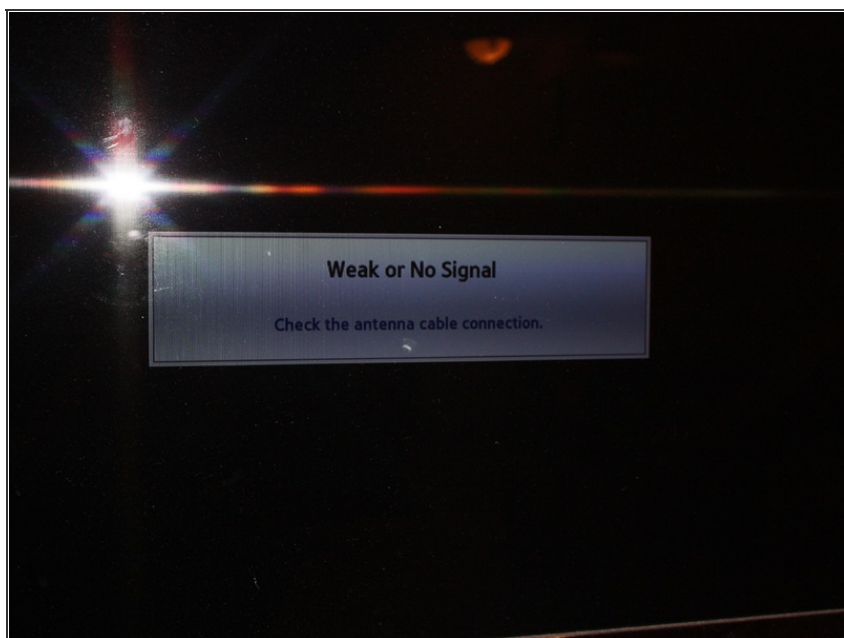
- [Hot Glue gun & hot glue \(1\)](#)
- [Shears \(1\)](#)
- [Stapler Gun \(1\)](#)
- [Wire cutter/stripper \(1\)](#)



PARTS:

- [matching transformer \(1\)](#)

Step 1 — Over-the-Air TV Antenna



- My wife LOVES the Summer Olympics. However, we don't have cable. I need to find a way for her to be able to watch. Of course, we could just get cable... but what fun is that?!

Step 2



- You will need the following materials: 1 aluminum can, something to mount the can to (I used a piece of scrap wood), coax cable and, most importantly, an impedance-matching transformer from RadioShack.

Step 3



- First, start by cutting the soda can in half the long way with tin snips, or shears.
- Mount these can halves to something to keep them in place. I used a staple gun to hold them to a piece of scrap wood.
- I also attached a small-gauge wire to the inside corner of each half. This will be a pain. I had trouble soldering this part, so I sanded off the coating from the inside of the can, and folded the wire into the corner and hot-glued it down. It works pretty well, but I feel a solder joint would be better.

Step 4



- Next attach each wire to a lead on the matching transformer. I bought [this transformer](#) at RadioShack for \$6.
- I also attached the matching transformer to the wood with an elastic band, not fancy at all.

Step 5



- Finally, attach the new antenna with a coax cable to the back of the TV. You will probably have to run a scan for channels and make sure you have the TV set to "AIR."
- I have to admit mine works really well. We now get about 8 channels, all local. The picture and audio are great! I even have the antenna set up in our basement family room, which has no windows or anything. Here is a picture of the TV displaying the local weather. Not too shabby for less than \$10.
- Now the wife can watch the Olympics!